

RESILIENT COMMUNITY PARTNERSHIP

CITY OF NEW CASTLE • DELAWARE COASTAL PROGRAMS

The Delaware Coastal Programs and the Resilient Community Partnership

Many communities throughout Delaware are threatened by inland flooding, coastal storms, sea level rise, and changing climates. To help address these challenges, the Delaware Coastal Programs (DCP) initiated the Resilient Community Partnership, a program that leverages federal funding provided by the National Oceanic and Atmospheric Administration (NOAA) to help Delaware communities improve their planning and preparation capabilities for responding to coastal hazards.

This latest iteration of the partnership is with the City of New Castle. The DCP has provided direct staffing, technical support, public outreach and training necessary to support the community's efforts through the stages of vulnerability assessment, planning and implementation of adaptation and mitigation practices.

Delaware Coastal Programs improves local capacity to conserve and wisely manage coastal resources and supports the integration of coastal management principles through local planning and implementation activities.

For more information about the Resilient Community Partnership, contact Kelly Valencik at: kelly.valencik@state.de.us

<http://de.gov/coastal>



WORKING TOGETHER FOR A SAFE AND SUSTAINABLE COMMUNITY IN THE CITY OF NEW CASTLE

The City of New Castle, like other low-lying Delaware communities, is vulnerable to natural hazards from multiple sources. New Castle is particularly at risk due to its location along the Delaware River, which makes it susceptible to stream and tributary flooding, storm surge, and extreme tides, and combinations of these factors. A significant portion of the City is located in the coastal floodplain and within an area projected to be impacted by future sea level rise.



Photo credit: AECOM

PREPARING FOR HAZARDS TODAY - PLANNING FOR RISKS TOMORROW

Starting in summer 2017, the Delaware Department of Natural Resources and Environmental Control's Delaware Coastal Programs (DCP) office began partnering with the City of New Castle to carry out a comprehensive assessment of risks to the community from flooding due to coastal storms, sea level rise and extreme tides. A technical assessment of City vulnerabilities was performed by AECOM. In addition, the City formed a Preparedness Task Force and held public workshops to inform the project's development of adaptation and mitigation options through vetting mapping results and advisement on community priority areas. A comprehensive Vulnerability Assessment and Adaptation Plan is the end result of this Partnership and is available online at: <http://de.gov/resilientcommunity>

MOVING TOWARDS RESILIENCE



CREATING A PREPARED AND RESILIENT COMMUNITY

PROJECT COMPONENTS

Vulnerability Mapping and Assessment to Characterize Current Hazards and Future Risk

The project team performed a document review and an analysis of future flood conditions to understand where the City of New Castle would be most vulnerable to flooding. The analysis built upon existing datasets including Federal Emergency Management Agency's (FEMA's) Flood Insurance Study (FIS) for New Castle County, tidal records and analysis from the National Oceanic and Atmospheric Administration (NOAA), and Delaware Department of Natural Resources and Environmental Control's (DNREC's) projections of sea level rise.

Identification and Prioritization of Vulnerabilities

Based on the mapping and public input, the project team assessed the sensitivity of critical structures and flood depths at which they are affected by flooding. Using a scoring process, several structures were identified as the most vulnerable in the City including the City of New Castle Municipal Services Commission (MSC) office on Chestnut Street and the Police Department building on Wilmington Road. The Public Works Yard, the MSC building and garage adjacent to the Police Department also ranked highly.

Public Engagement

The City established a Preparedness Task Force whose focus will continue to be on increasing flood preparedness and resiliency the City and to carry forward implementation of the Vulnerability and Adaptation Plan. This group of City residents and stakeholders served as an important resource for understanding how hazards might impact communities, vetted the findings of the vulnerability assessment, assisted with public workshops, and provided guidance on the development and prioritization of adaptation options. Two public workshops were held to introduce the project and its findings to City residents, one in September 2017, and the other in March 2018.

RECOMMENDED ACTIONS OR ACTIVITIES FOR THE CITY

Numerous actions or activities are being recommended through input received from residents at two public workshops, comments from task force members at multiple task force meetings, review of documents, and many project team meetings. In many ways, these actions or activities represent the City's vision for resiliency for decades to come. General cost estimates are provided for each of the options.

The actions or activities are categorized as follows:

Near-Term Standalone: Planning, Community Engagement, Regulatory, and Economic actions or activities that can be initiated in the near future without need for any preceding tasks and are generally independent of other actions or activities.

Near-Term Sequential: Information Gathering tasks that could be initiated in the near future without need for any predecessor tasks and would be needed before subsequent actions or activities are undertaken.

Mid-Term Sequential: Modelling efforts that would build upon the obtained information and data on the City.

Long-Term Sequential: Capital Infrastructure, Capital Natural Resources, and Acquisitions, which are the culmination of predecessor actions or activities.

See the full report and list of actions at:

<http://de.gov/resilientcommunity>